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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,174	03/10/2004	Gerhard Siemeister	SCH-1815-C1	3503
23599 7590 09/20/2007 MILLEN, WHITE, ZELANO & BRANIGAN, P.C. 2200 CLARENDON BLVD. SUITE 1400 ARLINGTON, VA 22201			EXAMINER HUGHES, ALICIA R	
			ART UNIT 1614	PAPER NUMBER
			MAIL DATE 09/20/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<p align="center"><b>Office Action Summary</b></p>	<b>Application No.</b> 10/796,174	<b>Applicant(s)</b> SIEMEISTER ET AL.	
	<b>Examiner</b> Alicia R. Hughes	<b>Art Unit</b> 1614	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 May 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2 and 4-22 is/are pending in the application.
- 4a) Of the above claim(s) 8 and 12-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-7 and 9-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 May 2007 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Status of the Claims and Examination***

Claims 1-2, 4-7 and 9-11 are pending and the subject of this Office Action. Applicants cancelled claim 3 in its response on 02 May 2007. Claims 8 and 12-22 are withdrawn from consideration, being drawn to a non-elected invention. See 37 C.F.R. 1.142(b).

Applicant's arguments and amendments filed on 2 May 2007 in response to the non-final rejection filed by this Office on 02 November 2006 have been fully considered, but they are not deemed to be persuasive. Rejections and objections not reiterated from previous office actions are hereby withdrawn. The following rejections are reiterated and expounded upon, and they constitute the complete set presently being applied to the instant application, hereby making this rejection FINAL.

### ***Claim Rejections – 35 U.S.C. §103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-2, 4-7 and 9-11 are rejected under 35 U.S.C. §103(a) as being obvious over Thorpe et al (U.S. Patent No. 6,703,020).

The rejections germane to this portion of the present Office Action as set forth in the Office Action filed on 02 November 2006 are incorporated herein by reference.

Applicant argues that Thorpe et al do not recite a pharmaceutical composition comprising at least one compound of the formula I and at least one compound of the formula II having the recited functional properties of the present invention. However, the Office notes, that by Applicants' own admission, "Thorpe ... discloses the potential antitumor effects of a VEGFR inhibitor or a Tie2 inhibitor (i.e., as single agents)." Page 15, lines 1-2 of Applicants' Arguments in Response to Non-Final Rejection. This essentially meets both limitations for compound I and compound II as set forth in Applicants' independent claim 1. Further, it is well-understood in the biochemical arts that if two agents possess the ability to treat the same disease or condition when used alone, there is an expectation of success, based on an additive effect, to treat the same disease or conditions with the agents are used together. In consideration thereof and based in the disclosure in Thorpe et al that teaches combination therapy as an accepted use (Col. 112, lines 14-15), Applicants' argument regarding the applicability of Thorpe et al as prior art against claims 1, 2, 4, 5, and 7 is unpersuasive.

With regard to claims 10 and 11, as noted prior, Thorpe et al teach "that using a tumor-binding ligand to deliver angiopoietin-1 to tumor blood vessels would readily deliver on the order of 500,000 angiopoietin-1 molecules to a vessel lumen. This would overwhelm the Tie2

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receptor system, totally saturating the Tie2 receptors with the angiopoietin-1 ligand” (Col. 80-81, lines 66-67 and 1-4, respectively). As a result of the Tie2 receptors being overly saturated, Angiopoietin-2 would be unable to bind and **the combined result would be the inhibition of VEGF.**” (Thorpe et al II, Col 81, lines 4-6)(emphasis added).

By Applicants’ own admission, “Thorpe expressly teaches that angiopoietin-1 does not have any significant downside and can be administered to prevent vascular remodeling or for its anti-inflammatory effects” (See Page 15, para. 2 of Applicants’ Arguments). However, Applicant goes on to suggest that Thorpe et al teach away from the same, noting for example, a laundry list of therapeutic agents that can be combined with Thorpe’s anti-VEGFR antibody and that the particular combination applicable to the instant invention is not disclosed in any of the examples in Thorpe et al.

Neither of the above points negate the applicability of Thorpe et al to the instant claims. Agreeably, Thorpe et al is a broad patent that discloses numerous agents to treat a number of diseases and conditions. However, the breadth of the patent itself is inadequate justification for why the disclosure of the invention in the instant application is not obvious. Applicant “[r]eading a list and selecting a known compound to meet known requirements in no more ingenious than selecting the last piece to put in the last opening of a jigsaw puzzle.” *Sinclair & Carroll Co.*, 325 U.S. at 335.

Furthermore, the stating of varying functions of angiopoietin-1, for example, is not the equivalent of “teaching away” from the portion of the Thorpe et al. reference applicable to the instant claims. That the examples provided in a reference do not explicitly demonstrate/model the disclosure in a compared patent application does not *per se* render the disclosure unobvious

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where the reference does teach the combination that is the subject of the invention. Contrary to Applicants' position, the requisite suggestion has been made that would motivate those coming after the invention is Thorpe et al to create the instant invention.

Finally, while Applicants' claim that subject matter in claims 10 and 11 are free of the prior art because of alleged insufficiencies in Thorpe et al to teach the limitations set forth in independent claim 1, for the reasons set forth *supra*, regarding the applicability of Thorpe et al to the instant case, this argument, too, is deemed unmeritorious.

In consideration of the foregoing, Examiner's previous rejection of Claims 1-2, 4-7 and 9-11 under 35 U.S.C. 103(a) as being unpatentable over Thorpe et al. is maintained.

#### ***Conclusion***

No claims are allowed.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Hughes whose telephone number is 571-272-6026. The examiner can normally be reached from 9:00 AM to 5:00 PM, Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel, can be reached at 571-272-0718. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Public PAIR only. For information about the PAIR system, see <http://pair-direct-uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

17 August 2007

  
ARH

  
ARDIN H. MARSCHEL  
SUPERVISORY PATENT EXAMINER